

Success in HIV Prevention

some strategies and approaches

By **Peter Aggleton**

With a Preface by Purnima Mane, UNAIDS



Success in HIV Prevention

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Tel: (01403) 210202 Fax: (01403) 211001
e-mail: avert@dial.pipex.com



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Dedication

To Preecha Anurakpongpee,
his mother and father,
and the Karen people of his village
near Omkoi in Thailand.

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Preface

Much has been written on the response to HIV and AIDS in the last decade, but the vast majority of such writings are in a language and form that makes them inaccessible to those who are in the front-line response to the epidemic. It is refreshing therefore to find a book which succeeds in presenting the major lessons learned in HIV prevention in a style and language that makes this information more accessible to those who need it, viz., community and health workers, and those working in voluntary organisations. This book therefore fills a major gap in HIV prevention by documenting these achievements concisely and clearly.

While the issues covered are of global relevance, *Success in HIV Prevention* has been written with industrialised world needs in view. This is appropriate given the need to contextualise the lessons learned. Similar efforts are needed though for the developing world where access to information is often restricted, and where the epidemic continues to develop at an alarming rate. Here too there have been notable successes, but many have gone unnoticed and important lessons have remained unlearned. It is my sincere hope that such an effort will follow shortly so as to benefit AIDS workers globally, irrespective of the level of development of the context in which they work.

Purnima Mane

Programme and Planning Coordinator

Joint United Nations Programme on HIV/AIDS

Geneva, Switzerland

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Introduction

Since the start of the epidemic, much has been learned about how best to undertake HIV prevention. The major impetus for this learning has come both from the expressed needs of affected groups and communities, and the eagerness of health workers in both formal and informal sectors to meet such needs speedily and effectively. An additional stimulus has been the move towards what is sometimes called an 'evidence-based' approach to health promotion, including interventions for HIV prevention.

This book summarises what has been learned about effective work in HIV prevention. The emphasis is upon those strategies and approaches that are most successful in preventing HIV transmission generally, as well as among groups that may be especially vulnerable to infection. It has been written to offer a summary of what has been learned so far, and as a guide to those involved in HIV prevention. In the space available, it has not been possible to address all the issues that HIV raises, the focus is instead upon those aspects of prevention for which there is strongest evidence.

Success in HIV Prevention is intended for a broad readership. It is intended to serve as a guide for those initiating HIV prevention and as a source of reference for those who need to justify their actions in the light of available evidence. It will be of use to health workers, teachers, youth and community workers, as well as those working in voluntary organisations and groups. We hope you find it supportive and useful in your work.

Peter Aggleton and Annabel Kanabus
London and Horsham

February 1997

Evidence of Success

Introduction

When the first cases of AIDS were reported in the 1980s, a wide range of groups acted to alert people to the steps that could be taken to protect against infection. They included doctors, nurses, teachers, and community groups, as well as people already living with HIV disease. New knowledge and skills had to be acquired in order to undertake this work. Nowhere was this more evident than in health education and health promotion where workers were frequently called upon to explain which behaviours posed a risk of infection and which were safe. People needed to be supported in acquiring the skills necessary to practice safer sex and safer drug use. And we all had to find ways of challenging the prejudicial and discriminatory attitudes that some people held. In the early days, people went about much of this work in the best way they could – using the techniques and skills they already had, adapted where necessary to the specific issues raised by HIV and AIDS.

Evidence-based health promotion

As time has passed, however, there have been increasing demands for health promotion workers to justify the success of what they do, not on the basis of tradition and past precedent, but on the basis of concrete *evidence* – facts about what does and does not work, facts about what is the most successful health promotion approach to use, and facts about what is the most economic approach to adopt. This move towards what has been called an 'evidence-based' approach to health promotion is part of a wider trend in health and education towards greater accountability and better 'value for money'. In a situation where resources for health promotion are limited, can we justify using approaches that are unproven or of questionable effectiveness? Purchasers of services need this kind of information in order to commission appropriate interventions for prevention and care, and service providers need to know what kinds of services to offer.

Success in HIV Prevention has been developed to assist decision making about the kinds of HIV and AIDS-related health promotion activity to undertake. It brings together findings from international research studies and reviews since the beginning of the epidemic, and offers guidance on the kinds of approaches that should be adopted when working to prevent HIV infection and to promote sexual and reproductive health. It has been designed to be of value to everyone working in HIV and AIDS-related health promotion.

Types of evidence

We can use a number of techniques to decide whether a particular style of health promotion is successful. Some of these are more rigorous than others. At one end of the spectrum is intuition or a 'gut feeling' that something must be achieving what it set out to achieve. At the other extreme is the rigorously controlled experimental study in which one group of people receives the intervention and another strictly comparable group does not. As in a clinical trial for a new drug, efforts can be made to find out whether differences can be detected between the two groups after the intervention has taken place. Towards the intuition end of the scale comes informal observation, or simply noticing that something seems to produce a particular effect. Towards the experimental end of the scale come evaluation studies which examine the extent to which pre-defined objectives are achieved by a particular health promotion approach. All of these approaches have something to offer when it comes to understanding what health promotion does, but the challenge lies in knowing which intervention to use in which set of circumstances.¹

Intuition and gut feelings

In situations where there is a pressing need to respond quickly, and where there may be limited opportunities for consultation or a systematic review of the evidence, we may all be tempted to fall back on what we intuitively believe is the best thing to do. On many occasions, past knowledge and experience may offer useful pointers as to what is the appropriate course of action. For example, it may tell us that what people need is information

and reassurance in order to decide whether or not they have been at risk of acquiring HIV infection. This kind of intuition is helpful in that it can enable us to begin to act swiftly to alleviate unnecessary fears and anxieties.

Intuition is less good at telling us what are the best means by which to achieve our goals of informing and reassuring. Should this be by giving someone a leaflet to read, should it be by offering them a fifteen minute talk, should it be by inviting them to participate in a group discussion, or should it be by showing them a video? In this kind of situation, intuition and gut reactions may be inadequate when it comes to decision making. They may, for example, be based upon only a very narrow range of experience. We may need to use other means to decide what to do.

Observation

A great deal of understanding about the world derives from observations of people and events. By carefully observing a situation and by noting the kind of things that happen time and time again, it is possible to start developing hypotheses, or ideas, about how things fit together. By observing what people say to each other after watching a particular video on AIDS, for example, we might conclude that although knowledge seems to be improved, anxieties are higher too. By observing what happens when a different video is watched, we might conclude that this second video tends to allay unnecessary anxieties rather than increase them.

When carried out rigorously and *systematically*, observation can provide useful clues as to what is taking place in health promotion. It can help us understand whether the approaches we use really do meet people's needs. It can lead us to modify what we are doing so as to engage more directly with the concerns of a particular group. It can even lead to an intervention being abandoned because of unforeseen consequences such as an increase in discriminatory attitudes towards particular individuals or groups.

While observation can tell us a great deal about the *processes* involved in health education and health promotion, it is less good at helping identify the causes of particular effects. This is because rarely does one single factor

influence what an observed person does. More usually, our behaviour is influenced by many things acting together. Some of these may be easily observable and measurable whereas others may not. Identifying which is *the* critical factor, or combination of factors, influencing behaviour may require the use of other techniques, including those discussed below.

Objectives-based evaluation

In situations where a number of factors may affect what people think, feel and do, and where we want to influence or change these thoughts, feelings and behaviours, it is not uncommon to set some initial objectives, intervene in some way and then examine the extent to which our intervention has been successful in bringing about the changes desired, focusing on the *observable outcomes* associated with particular health promotion interventions.

This is precisely what happens at school when teachers set goals for their pupils, organise lessons and assess what has been learned by means of tests and examinations. It is also what nurses do when they plan and deliver care using the nursing process – assessing needs, making plans to satisfy these needs, implementing these plans and evaluating whether desired changes have been brought about. And it is what many of us do in real life when we attempt to solve a problem – be it as mundane as crossing the road, or as esoteric as setting out to become a millionaire.

In health promotion, it is also possible to set objectives for a particular health promotion intervention, intervene and then see whether or not these pre-set objectives have been achieved. Usually, measurements are taken on two occasions in order to compare knowledge, beliefs and behaviours after the intervention with those before. The choice of intervention is often made on the basis of some 'theory' about what is most likely to bring about desired effects. For example, if we want to change people's knowledge and understanding, *learning theory* tells us that it may be useful to provide them with new facts in ways that encourage active learning. Similarly, if we want to change behaviour, towards safer sex for example, *health promotion theory* suggests that this is difficult to achieve in the

absence of appropriate resources such as condoms, the opportunity to acquire and practice new skills, and the perception that this is a reasonable thing for someone like yourself to do.

Objectives-based evaluation, as such an approach is called, can be a good way of identifying what works and what does not in circumstances where it is believed that a number of factors acting together bring about changes in health behaviour and health status. It is less good though at enabling us to identify which of these many factors are the most crucial ones, and how they combine together to achieve their effects. This is because many of the key variables are usually left uncontrolled in the situations in which objectives-based evaluation is used. For example, by administering a short questionnaire before and after an intervention to increase people's knowledge about the health risks linked to the sharing of syringes and needles, we may find we have met our goal of improving people's knowledge about these risks. But we can never be sure that it was our intervention that brought about the change in knowledge rather than, say, a parallel government health promotion initiative seen on the television.

Experimental evaluation and Randomised Controlled Trials (RCTs)

One of the best ways of determining the causes of changes in what people think and do is to conduct an experiment. First, two or more groups of similar people are identified. One of these groups then receives the intervention that is believed to cause the changes (the experimental group) and the other does not (the control group). Finally, steps are taken to measure any differences between the experimental and the control group which, if perfectly matched and all other factors remain constant, can be said to be the effects of the intervention made.

There are several ways of ensuring that groups of people really are as similar as possible. Sometimes they can be matched so that for every person of a particular type in one group there is a counterpart in the other. On other occasions, people are allocated at random to one of the two groups and may be left unaware of whether they are in the experimental or control group. That way, it is reasoned, their expectations about which group they

are in cannot in any systematic way influence the outcome of the study. This is called a randomised controlled trial, or RCT for short.

In recent years there has been much talk about RCTs among those concerned with evidence-based health promotion. Some go as far as to call this approach the 'gold standard' when it comes to evaluating interventions.² Others have suggested that current enthusiasm for RCTs above all other styles of evaluation is 'both poor scientific judgement and bad public health policy ... To adopt the position that evidence short of a randomised trial is useless amounts to denying the possibility of learning from experience – which, although often difficult, is not impossible.'³

Certainly, RCTs are a good way of linking causes to particular outcomes. But in order to study the links between specific interventions and their effects in this way, we must conduct our studies in very controlled, and perhaps artificial, conditions (close to those of the laboratory scientist who wishes to control all variables except those that are being manipulated). This poses problems for *generalisability*. Can we be sure, for example, that the effects of a peer-led education programme among homeless young people in New York can be generalised to their counterparts in London? And is it really reasonable to suppose that the effects of group counselling sessions conducted among younger gay men in San Francisco are generalisable to Birmingham? The answer may be yes, but additional evidence is usually needed in order for us to be sure that this really is true.

Sources:

1. See, for example, P Aggleton, A Young, D Moody, M Kapila and M Pye (eds.) (1991) *Does it Work? Perspectives on the Evaluation of HIV/AIDS Health Promotion*, London, Health Education Authority.
2. A Oakley, D Fullerton, J Holland *et al.* (1995) Sexual Health Education Interventions for Young People: a methodological overview. *British Medical Journal*, 310, 158–162.
3. J Normand, D Vlahov and L Moses (eds.) (1996) *Preventing HIV Transmission: the Role of Sterile Needles and Bleach*. Washington, D.C., National Academy Press for The National Research Council and the Institute of Medicine, 202.

Conclusions

Given what has been said, it is crucial to bear in mind the strengths and limitations of different kinds of evidence when making decisions about which styles of HIV and AIDS-related health promotion to use. By itself, no one approach can answer all questions about the appropriateness and effectiveness of different interventions for prevention. However, by bringing together evidence collected in different ways, it may be possible to identify some of the more successful approaches to HIV and AIDS-related health promotion. This book describes some of the key sources of evidence that may be used to justify the work we do.

HIV Prevention – basic principles

2

Why HIV prevention?

At the end of 1996, the Joint United Nations Programme on AIDS and the World Health Organisation estimated that since the start of the epidemic, close to 30 million people worldwide have been infected by HIV, the virus that causes AIDS. Of these, an estimated 8.4 million have developed AIDS, and 6.4 million have died. An estimated 510,000 people with HIV infection currently live in Western Europe, and a further 750,000 live in North America.¹ By the end of 1996, there had been 13,720 reported cases of AIDS in Britain, and a reported 28,447 infections.²

Contrary to popular belief, no one 'group' of people is intrinsically more vulnerable than any other. It all depends on where you are and what stage the epidemic has reached. In some parts of the world, heterosexuals were among the first to be affected. In other parts of the world, gay men were those most affected early on.³ No matter where you live, no matter how old you are, and no matter how good a life you have led, you can acquire HIV infection through having unprotected anal or vaginal sex. HIV may also be transmitted through unprotected oral sex, although the risks are much lower.

Because AIDS is not talked about as much now as it was ten years ago, many people think the epidemic is under control. But it is not. In Britain in 1996, 2896 new cases of HIV infection were reported, of whom approximately 27% were probably acquired through sex between men and women, 56% through sex between men and 6% through the sharing of needles and syringes to inject drugs.² Globally, the picture is even more serious. UNAIDS has estimated that in some cities in Africa, a third of the adult population is already infected, that the epidemic in Asia will develop rapidly over the next few years, and that important new epidemics will arise in central and eastern Europe and the Pacific.⁴

There is still no cure for HIV disease, and no vaccine to protect against infection. Once a person is infected, they remain infectious for life, and their life expectancy is seriously shortened. AIDS has not gone away, nor are the risks any less than they were.

Sources:

1. UNAIDS and WHO (1996) *HIV/AIDS: The Global Epidemic*, December 1996. Geneva, UNAIDS and WHO.
2. AIDS/HIV Quarterly Surveillance Tables, No. 34, Data to end of December 1996. Colindale, PHLS and SCIEH.
3. World Health Organisation (1994) *AIDS: images of the epidemic*. Geneva, World Health Organisation.
4. UNAIDS Press Release (1995) *AIDS on Rise in Asia, Peaking in Parts of Western Europe*. 24 November. Reston, VA, Reuters Newsmedia.

Successful approaches

Simply providing information about HIV and AIDS has few predictable effects on behaviour. Some people change their behaviour in the light of information they have received, whereas others do not. Yet others behave in unpredictable ways after having received information.¹

The most successful ways of promoting safer sex are those that focus clearly on HIV-related risks. They (i) provide information on how HIV is and is not transmitted, (ii) encourage a personal appraisal of risk, (iii) include training in skills for sexual negotiation with an emphasis on the skill needed to refuse unsafe sex, and (iv) provide access to resources such as condoms and to appropriate health services.¹

The following five principles are present in successful HIV prevention programmes.²

- Assess what people already know and feel, check out with them the skills they already have.

- Identify the environmental and other *constraints* to acting safely in sexual relationships e.g. if no condoms are available locally, how can people be expected to practice safer sex?
- *Plan* the health education campaign, activity or intervention. Do not leave things to chance. Set goals and identify objectives. Do this in conjunction with those whose behaviour it is hoped to influence.
- Intervene in an *appropriate* way. Leaflets, posters and talks can only increase knowledge, they cannot change behaviour. Counselling can enable people to feel more empowered. Skills training can help people develop new skills.
- *Evaluate* what happens during the intervention (this is sometimes called process evaluation) and the effects of the intervention (this is sometimes called outcome evaluation).

There is strong evidence that small group counselling and one to one counselling can be successful in promoting safer sex. Small group counselling which includes skills-training and peer support has been shown to be effective in promoting increases in condom use.³ Couple counselling has been shown to be successful in promoting the uptake and sustained practice of safer sex among couples where one partner is HIV positive and the other is seronegative.⁴

Sources:

1. P Aggleton (1994) *Sexual Behaviour and HIV/AIDS. A Review of the Effectiveness of Health Education and Health Promotion*. Utrecht: Landelijk Centrum GVO.
2. P Jones (Ed.) (1992) *HIV Prevention: a working guide for professionals*. London, Health Education Authority.
3. J Kelly *et al.* (1994) The Effects of HIV/AIDS Intervention Groups for High-risk Women in Urban Clinics. *American Journal of Public Health*, 84, 1918–22.
4. N Padian *et al.* (1992) Prevention of Heterosexual Transmission of Human Immunodeficiency Virus through Couple Counselling. *Journal of Acquired Immune Deficiency Syndromes*, 6, 1043–48.

Different approaches for different groups?

While the principles described underpin successful prevention efforts generally, it is sometimes necessary to 'fine tune' approaches to meet the needs of specific groups. These include young people, gay and bisexual men and injecting drug users. It should always be remembered, however, that these groups overlap.

What works with young people?

Not all young people are at equal risk of acquiring HIV. In Britain and many other countries, young gay men are at special risk, as are young people who inject drugs. Homeless young people may face greater risks because of their lack of contact with health services and because some may sell sex to buy food and clothes and in order to have somewhere to live.

Contrary to popular belief, providing young people with information about sex does *not* encourage sexual activity. Comprehensive reviews of school-based programmes show that young people receiving HIV-related education are less likely to engage in sex, and those who do so are more likely to have sex less often, and to have safer sex.¹

The most successful approaches to HIV prevention with young people combine information about safer sex and safer drug use with practice in how to resist social pressures, the reinforcement of norms and values against having unsafe sex, skills-building activities and access to resources such as condoms.²

While peer-led education may be a popular way of educating young people about HIV and AIDS, there are few reliable studies of its effectiveness in bringing about and sustaining behaviour change.³ In and out of school settings, culturally appropriate educational games,⁴ training in coping and sexual negotiation skills, and access to health care and other resources⁵ have all been shown to be associated with sexual risk reduction. Among young gay men, individual counselling, peer education and skills building have been shown to be successful in promoting safer sex.⁶ Further discussion of these and other issues can be found in the next chapter.

Sources:

1. A Grunseit, S Kippax, P Aggleton, M Baldo and G Slutkin (in press) Sex Education and Young People's Sexual Behaviour: a review of studies. *Journal of Adolescent Health*.

2. D Kirby *et al.* (1994) School-based Programs to reduce Sexual Risk Behaviours: a review of effectiveness. *Public Health Reports*, 109, 339–360.
3. N Fee and M Youssef (1993) *Young People, AIDS and STD Prevention*. Geneva, World Health Organisation, Global Programme on AIDS.
4. J Jemmott *et al.* (1992) Reductions in HIV Risk-associated Sexual Behavior among Black Male Adolescents: effects of an AIDS prevention programme. *American Journal of Public Health*, 82, 372–77.
5. M Rotheram-Borus *et al.* (1991) Reducing HIV Sexual Behaviors among Runaway Adolescents. *Journal of the American Medical Association*, 266, 1237–41.
6. G Remafedi (1994) Cognitive and Behavioural Adaptations among Gay and Bisexual Adolescents. *Journal of Adolescent Health*, 15, 142–48.

What works with gay men?

Over the last decade, much has been learned about the most effective ways of preventing HIV transmission among gay and bisexual men. In Britain, Australia, the Netherlands, Norway and the US, early efforts at health education and health promotion arose from within the communities most affected, most usually at a time when national governments denied the seriousness of the epidemic. More recently, there has been increasing health and local authority involvement.

The majority of evaluated interventions have looked at interventions involving well educated and articulate white gay men. Here, successful approaches to the promotion of safer sex include one or more of the following: small group counselling, community outreach work, community mobilisation, peer education and sexual negotiation skills training.¹ Community-based education using popular gay men as peer educators has been shown to be successful in promoting the uptake of safer sex among men using gay bars.² Self management training and sexual assertiveness training and support have been successful in promoting risk reduction among gay men at high risk of acquiring HIV.³

Much less is known about how best to promote safer sex among young gay men, among men who do not identify themselves as gay, and among men from minority ethnic communities. There is good reason to believe that continued efforts will be needed to reach members of these groups, and to sustain safer sex among men who were reached by HIV prevention efforts early in the epidemic.⁴

Sources:

1. P DeCarlo (1995) Can HIV Prevention Make a Difference for Men who have Sex with Men? San Francisco, University of California, San Francisco, Center for AIDS Prevention Studies.
2. J Kelly *et al.* (1992) Community AIDS/HIV Risk Reduction: the effects of endorsements by popular people in three cities. *American Journal of Public Health*, 82, 1483–89.
3. J Kelly *et al.* (1992) Behavioral Intervention to Reduce AIDS Risk Activities. *Journal of Consulting and Clinical Psychology*, 57, 1, 60–67.
4. P Aggleton (1995) *Men who Have Sex with Men – Social and Behavioural Research, Implications for Needs Assessment*. London, Health Education Authority.

What works with injecting drug users?

People who inject drugs are potentially at risk from HIV in two ways – sexually if they have unprotected sex with someone who is already infected, and through the sharing of needles and syringes. Successful interventions among injecting drug users most usually have several components. These include outreach work,¹ Peer education, and the distribution or exchange of clean needles and syringes.² There is some evidence that intensive HIV education and counselling may assist in the promotion of risk reduction among injecting drug users and their partners.³

Further discussion of these and other issues can be found in Chapter 5.

Sources:

1. B Wiebel *et al.* (1993) Positive Effect on HIV Seroconversion of Street Outreach Intervention with IDUs in Chicago. Abstract WSC 152, 9th International Conference on AIDS, Berlin.
2. P Lurie & A Reingold (1993) *The Public Health Impact of Needle Exchange Programmes in the US and Abroad*. San Francisco, CA, University of California Press.
3. National Institute on Drug Abuse, The National AIDS Demonstration Research Project. *Effectiveness of AIDS Outreach Intervention/Prevention Research Projects in Out-of-Treatment Injecting Drug Users*. Rockville, Md., National Institute on Drug Abuse, Division of Clinical Research, Community Research Branch.

Young People and HIV – needs and approaches

3

What risks do young people face?

In many people's minds, being young or being an 'adolescent' triggers images of sex, drugs, and risk taking. It is popularly believed, for example, that young people live only for the present and not for the future. 'Adolescents', as young people are often called, are most usually represented in the media as self-centred and pleasure seeking. The 'thrills, pills and spills' theory of youth sometimes makes it difficult to think sensibly about young people and their AIDS-related needs.¹ So what are the facts?

First, we should remember that HIV is transmitted only through unprotected vaginal or anal sex and through the sharing of syringes and needles. Second, it is salutary to remember that the vast majority of young people do not consume alcohol or drugs to excess. Moreover, whereas 57% of 16–19 year-olds report having had a sexual partner, reported condom use at last intercourse was higher among 16–24 year-olds than any other age group in a recent major national survey.² Indeed, the health promotion challenge in relation to condom use is greater for *older* young people, particularly those in relatively 'committed' relationships where condom use tends to be substituted by the contraceptive pill as the most common means of protection.²

Young people are clearly very diverse. While all have certain needs in common (e.g. access to unbiased information and resources to protect themselves and their partners from infection), they also differ from one another. Some young women, for example, may need extra support in being assertive about sex, whereas some young men may need help in understanding young women's sexual needs and wishes. Like adults, young people from all backgrounds may use illegal drugs, sometimes to excess. But patterns of drug use vary considerably from area to area, and within and between ethnic groups.

These are all important factors to take into account when working with young people to reduce HIV-related risks.

Sources:

1. P Aggleton and I Warwick (1997) *Young People, Sexuality and HIV and AIDS Education*. In L Sherr (ed.) *Adolescents and AIDS*, Reading, Harwood Academic Press.
2. A Bridgwood, G Malbon, D Lader and J Matheson (1996) *Health in England 1995: what people know, what people think, what people do*. London, Office for National Statistics/Health Education Authority.

Does education about AIDS make young people more sexually active?

It is commonly supposed that talking to young people about sex will make them do it. Such anxieties prevent many teachers, youth workers and parents from talking about sexual matters. Alternatively, they may encourage an over-emphasis on the negative aspects of sex – unwanted pregnancy, sexually transmitted diseases, AIDS – rather than positive aspects such as intimacy, sexual love and pleasure. Likewise when drugs are talked about the emphasis is often on the damage they can cause. This kind of unbalanced approach is often seen through by young people. In consequence, they may reject *all* that adults have to say, seeking guidance and role models from peers and from the media.

Contrary to what might popularly be believed, research looking at the effects of sex education on young people's sexual behaviour offers little evidence that it hastens the onset of sexual experience,¹ or increases sexual risk among those who are already sexually active.² Indeed, several studies from different countries show that good quality sex education can actually decrease the likelihood that young people will have sex,³ and increases condom use among those who are already sexually active.⁴

Sources:

1. K Wellings, J Wadsworth, A Johnson *et al.* (1995) Provision of Sex Education and Early Sexual Experience: the relation examined. *British Medical Journal*, 311, 417–420.
2. D Kirby, L Short, J Collins *et al.* (1994) School-based Programs to Reduce Sexual Risk Behaviors: a review of effectiveness. *Public Health Reports*, 109, 339–360 and A Grunseit, S Kippax, P Aggleton, M Baldo and G Slutkin (in press) Sex Education and Young People's Sexual Behaviour: a review of studies. *Journal of Adolescent Health*.

3. A Mellanby, F Phelps, N Crichton and J Tripp (1995) School Sex Education: an experimental programme with educational and medical benefit. *British Medical Journal*, 311, 414–417.
4. D Kirby, R Barth, N Leland *et al.* (1991) Reducing the Risk: a new curriculum to prevent sexual risk-taking. *Family Planning Perspectives*, 23, 253–263.

What works in school?

It is widely recognised that the best approaches to sex and drug education in schools are broad based and have several components. These include the provision of factual information about biology, sexual development, and sexual and drug-related risks; a concern with personal relationships, feelings and values; an emphasis on the acquisition of relevant negotiation skills (including but not restricted to how to say 'no'); and a consideration of wider social pressures and cultural expectations.¹

Successful sex education programmes have several key qualities. These include the provision of information, exercises to encourage an appraisal of values, and role play rehearsal to teach sexual negotiation skills.² Programmes that aim to reduce specific sexual risk-taking behaviours and which reinforce group norms against unprotected sex and discuss social pressures to have unprotected sexual activity have been shown to be particularly successful.³ School curricula with these qualities have been shown significantly to reduce the likelihood that students who have not had sex prior to their exposure to the curriculum will have had unprotected sexual intercourse eighteen months later.^{3,4}

Sources:

1. National Guidelines Task Force (1994) Guidelines for Comprehensive Sexuality Education. New York, Sex Information and Education Council of the US (SIECUS) and C Ray and D Went (1995) *Good Practice in Sex Education*. London, Sex Education Forum/National Children's Bureau.
2. H J Walter and R D Vaughan (1993) AIDS Risk Reduction among a Sample of Urban High School Students. *Journal of the American Medical Association*, 270, 6, 725–30.
3. D Kirby, L Short, J Collins *et al.* (1994) School-based Programs to Reduce Sexual Risk Behaviors: a review of effectiveness. *Public Health Reports*, 109, 339–360.
4. D Kirby, R Barth, N Leland *et al.* (1991) Reducing the Risk: a new curriculum to prevent sexual risk-taking. *Family Planning Perspectives*, 23, 253–263.

What works out of school?

There has been much discussion about the role of peer-led education in promoting HIV risk reduction among young people, and studies show that peers can be well respected sources of information and support on AIDS-related concerns.¹ Peer-led education has been shown to be effective in the field of substance abuse, and there are studies demonstrating its ability to bring about changes in HIV-related knowledge and attitudes.² Studies focusing on risk behaviours are harder to come by. The best peer-led education programmes have clear objectives, provide training, support and supervision for peer educators, are accompanied by service provision or referral to appropriate services, and include regular monitoring and evaluation.³

Ideally, service for young people should be provided in a variety of ways – through specialised clinics, through youth advisory services, through general practitioners and through local outreach work. The kind of services that are found most acceptable and appropriate by young people are those that offer a range of integrated services, are accessible at evenings and weekends, are close to public transport, have an appropriate image and atmosphere, and have approachable, non-judgmental and reassuring staff.⁴

Other successful out of school programmes include those that provide culturally appropriate opportunities for learning through videotapes, games, exercises and other materials. These have been shown to be effective in reducing the incidence of unsafe sex and promoting intentions to use condoms.⁵

Sources:

1. J Redman (1987) AIDS and Peer Teaching. *Health Education Journal*, 46, 150–151.
2. V I Rickert, M S Jay and A Gottlieb (1991) Effects of a Peer-counselled AIDS Education Program on Knowledge, Attitudes and Satisfaction of Adolescents. *Journal of Adolescent Health Care*, 12, 38–43.
3. N Fee and M Youssef (1993) *Young People, AIDS and STD Prevention*. Geneva, World Health Organisation, Global Programme on AIDS.
4. P Aggleton, H Chalmers, S Daniel and I Warwick (1996) *Promoting Young People's Sexual Health: a compendium of family planning service provision for young people*. London, Health Education Authority.
5. J B Jemmott, L S Jemmott and G T Fong (1992) Reductions in HIV Risk-Associated Sexual Behaviors among Black Male Adolescents: effects of an AIDS Prevention Intervention. *American Journal of Public Health*, 82, 372–377.

How can we meet the needs of special groups?

Some groups of young people have special needs in relation to HIV and AIDS. Perhaps the most obvious of these are related to gender. Young women in particular may require support in acquiring the assertiveness and sexual negotiation skills that may enable them to avoid unwanted or unprotected sex.¹ Young men on the other hand may need encouragement to listen carefully to what young women have to say and to respect their wishes in relation to sex and drug use.

The needs of young lesbians and young gay men may be missed by programmes and interventions that assume that all young people are heterosexual. There is evidence from the US at least that some young gay men may be at special risk of HIV. A variety of factors may cause this including the perception that AIDS is a disease of older men, a sense of low self worth caused by the reactions of parents and society, and less experience negotiating safer sex.^{2,3} Effective interventions among young gay men include risk-reduction counselling followed by peer education and referral to appropriate health services,⁴ and community based programmes using social, outreach and small group activities organised and run by young men themselves.⁵

Young Black people and young people from minority ethnic communities may also have special needs when it comes to the promotion of safer sex and safer drug use. These may include access to materials and messages that are linguistically and culturally relevant,⁶ as well as what some writers have called 'culturally relevant learning'. These include activities and videotapes that engage directly with the interests and anxieties of the young people concerned.⁷

Young homeless people may have special needs when it comes to HIV prevention. Some may have unsafe sex in order to obtain food and clothing, and in order to have somewhere to live. Some may share syringes and needles when injecting drugs.⁸ For many such young people, HIV and AIDS may seem less important than finding food and shelter. In order to be effective, intervention programmes among homeless young people need to address these concerns as well as AIDS-related issues.⁹ Providing access to health care and other resources, training in coping and sexual negotiation

skills, and video and art workshops have been shown to be effective in reducing high risk patterns of sexual behaviour and promoting consistent condom use among members of this group.¹⁰

Sources:

1. R DiClemente and G Wingwood (1995) A Randomized Controlled Trial of an HIV Sexual Risk-Reduction Intervention for Young African-American Women. *Journal of the American Medical Association*, 274, 1271.
2. R B Hays, S M Kegeles and T J Coates (1990) High HIV Risk-taking among Young Gay Men. *AIDS*, 4, 901–907.
3. J Gonsiorek (1989) Mental Health Issues of Gay and Lesbian Adolescents. *Journal of Adolescent Medicine*, 9, 114–122.
4. G Remafedi (1994) Cognitive and Behavioural Adaptations to HIV/AIDS among Gay and Bisexual Adolescents. *Journal of Adolescent Health*, 15, 142–148.
5. S Kegeles, R Hays and T Coates (1996) The Mpowerment Project: a community-level HIV Prevention Intervention for Young Gay and Bisexual Men. *American Journal of Public Health*, 86, 1129–1136.
6. M Dada (1992) *Multilingual AIDS – HIV Information for the Black and Minority Ethnic Communities*. London, Health Education Authority.
7. J B Jemmott, L S Jemmott and G T Fong (1992) Reductions in HIV Risk-Associated Sexual Behaviours among Black Male Adolescents: effects of an AIDS Prevention Intervention. *American Journal of Public Health*, 82, 372–377.
8. P Aggleton and I Warwick (eds.) (1992) *Young Homeless People and HIV/AIDS*. London, Health Education Authority.
9. G D Poschun (1993) Teen Peer Outreach-Street Work Project: HIV Prevention Education for Runaway and Homeless Youth. *Public Health Reports*, 108, 150–155.
10. M J Rotheram-Borus, C Koopman, C Haignere *et al.* (1991) Reducing HIV Sexual Risk Behaviors among Runaway Adolescents. *Journal of the American Medical Association*, 266, 1237–1241.

Gay Men and HIV – priorities and needs

4

What are gay and bisexual men's HIV prevention needs?

In Britain, in the United States, in Australia, and in European countries such as Norway, the Netherlands and Germany, gay and bisexual men were among the first to be affected by HIV. In Britain, and in spite of a developing epidemic among heterosexuals, gay and bisexual men continue to be the single group at greatest risk. In 1996, for example, 63% of reported cases of AIDS in the UK were probably acquired through sex between men. In that same year in England, Wales and Northern Ireland 57% of reported cases of HIV infection were attributable to sex between men.¹

In many countries, existing anxieties and prejudices about homosexuality have been fuelled by the advent of AIDS. Early in the epidemic, fears of germs, fears of sex and fears about those who are sexually 'different', quickly fused to establish the backcloth against which prevention efforts now take place.² In spite of claims that we live in a liberal and open society, prejudice and homophobia about gay men still persists. This makes it difficult for many people to think seriously about the issues. Such anxiety often spills over into any discussion of bisexuality among men, rendering bisexual men largely invisible, and causing many of their needs to remain unmet.³

It is important to remember that gay and bisexual men are not a species apart, even though some of their experiences and behaviours may be relatively unique. It is important to remember too that there exists much diversity among such men. Some may be exclusively homosexual in their feelings, desires and behaviour, whereas others may be attracted towards, and have sex with, both women and men. There is also no direct link between identity and behaviour. Some men who are behaviourally bisexual, for example, do not see themselves as 'bisexual', but as heterosexual or no different from the norm. Likewise, some behaviourally homosexual men do not see themselves as gay. And many behaviourally heterosexual men do

not give a name to their sexuality, taking it for granted that there is nothing special about it at all. This complexity makes work with gay and bisexual men especially challenging.⁴

While these many differences exist, it is also important to recognise that some common threads do run throughout many gay and bisexual men's experience. These include living with prejudice and being part of a group that is doubly stigmatized – both in relation to sexuality and in relation to AIDS. Additionally, and given the present nature of the epidemic in Britain at least, there is the burden of having to live closely with death and bereavement, among past and present friends and lovers.⁵

Sources:

1. AIDS/HIV Quarterly Surveillance Tables, No.34, Data to end of December 1996. Colindale, PHLS and SCIEH.
2. C Patton (1985) *Sex and Germs: The Politics of AIDS*. Boston, South End Press.
3. S George, H Deymen, P Farquharson, G Williams and D Burkle (1993) *Bisexuality and HIV Prevention*. London, Health Education Authority.
4. P Aggleton (1995) *Men who have Sex with Men: Social and Behavioural Research, Implications for Needs Assessment*. London, Health Education Authority.
5. See, for example, E Rofes (1995) *Reviving the Tribe: Regenerating Gay Men's Sexuality and Culture in the Ongoing Epidemic*, New York, Harrington Press, for a discussion of these issues.

What kinds of approaches work best?

A range of different approaches have been shown to be effective in promoting risk reduction among gay and bisexual men. These vary from those that aim to change individual beliefs and behaviours to those that adopt a more community-oriented focus, aiming to change norms and values among groups of gay and bisexual men, and aiming to better links between those who participate regularly in the gay community and those who may be more uncertain about their sexual identities and desires.¹

In many countries, studies have shown gay men to be relatively well informed about HIV-related risks, even in circumstances where unsafe sex

may be practiced.² Many intervention studies have therefore moved beyond the provision of information in their efforts to reduce HIV-related risks. Research has shown that training in the skills to talk about and negotiate safer sex and condom use can be a useful adjunct to the provision of information in promoting increased condom use.³

In several small towns in the US, popular 'opinion leaders' in gay bars and meeting places were trained to provide information about AIDS and safer sex to their friends and acquaintances, and to publicly endorse risk reduction behaviours. Subsequently, significantly fewer men reported practising unprotected sex in the towns concerned. In comparison to baseline measures before the intervention took place, significant reductions were observed in reported unprotected anal sex, and significant increases in reported condom use.⁴

For gay men who are anxious about their sexuality and sexual behaviour, group-based relaxation and stress management training has been shown to be effective in reducing the number of different sexual partners men report having in the month prior to a post-intervention interview. Why this should be the case is not clear, although it is possible that such training may help men communicate more clearly with one another, and may be empowering when it comes to negotiating whether or not to have sex.⁵

Relatively complex interventions that complement the provision of information with assertiveness training, role play and activities to develop relationship and social support skills, have been shown to bring about significant changes in the frequency of unprotected anal sex and condom use. These packages of intervention, however, require regular and continued group attendance, something that may not appeal to gay and bisexual men who lack confidence in their identity, and the time and opportunity to participate in several meetings.⁶

Beyond the relatively individualistic focus of many of the studies so far reviewed, there is evidence from studies of community interventions in Australia that social and cultural variables such as gay community 'attachment' (as measured through social and sexual involvement in the

gay community) may be important to the success of educational and other interventions to reduce sexual risk.⁷ In Britain, there is strong anecdotal evidence that the gay community media and community organising were important factors facilitating risk reduction among gay men in the early years of the epidemic.¹

Sources:

1. P Scott (1995) *Purchasing HIV Prevention: a no-nonsense guide for use with gay and bisexual men*. London, Health Education Authority.
2. P Aggleton (1995) *Men who have Sex with Men: Social and Behavioural Research, Implications for Needs Assessment*. London, Health Education Authority.
3. R O Valdiserri, D W Lyter, L C Leviton, C M Callaghan *et al.* (1989) AIDS Prevention in Homosexual and Bisexual Men: Results of randomized trial evaluating two risk reduction interventions. *AIDS*, 3, 1, 21–26.
4. J A Kelly, J S St. Lawrence, L Y Stevenson *et al.* (1992) Community AIDS/HIV Risk Reduction; the effects of endorsement by popular people in three cities. *American Journal of Public Health*, 82, 1483–1489.
5. T Coates, L McKusick, R Kuno and D P Stites (1989) Stress Reduction Training Changed Number of Sexual Partners but not Immune Function in Men with HIV. *American Journal of Public Health*, 79, 7, 885–887.
6. J A Kelly, K St. Lawrence, R Betts, T Brasfield *et al.* (1990) A Skills-Training Group Intervention Model to Assist Persons in Reducing Risk Behaviors for HIV Infection. *AIDS Education and Prevention*, 2, 1, 24–35.
7. S Kippax, R W Connell, G W Dowsett & J Crawford (1993) *Sustaining Safe Sex: Gay Communities Respond to AIDS*. London, Falmer Press.

What are the best ways of working with younger gay men?

While we must be careful not to stereotype younger gay men as a group, some may have special needs when it comes to HIV prevention. These derive both from age and from social vulnerability. While numerous US studies highlight the greater risks faced by younger gay and bisexual men, the Australian and UK literatures are more equivocal in their findings.¹ British data from Project SIGMA, for example, suggests that while younger men are more likely than older ones to engage in receptive anal sex, they may be more likely always to use a condom and less likely never to do so than older men in the same cohort.²

Like young people more generally, gay and bisexual young men are likely to benefit from well planned programmes of sex education in school.³ Unfortunately in Britain at least, there is strong evidence to suggest that teachers feel very apprehensive when teaching about sexuality in general, and gay and bisexual sexuality in particular. This means that the sexual health needs of many younger gay and bisexual men may go unmet, in this context at least.

Out of school, successful approaches to HIV risk reduction include individualised risk-reduction counselling and community level peer-led interventions. Studies suggest that risk reduction counselling appears to be particularly effective in promoting a decrease in unprotected anal sex when accompanied by subsequent peer-led education and referral to appropriate health services.⁴

Peer-led interventions that have shown particular promise in promoting safer sex among younger gay men include those that use social, outreach and group activities of a kind familiar to the group in question. In the US, these have been identified as including, but are not limited to, dances, film nights, picnics and volleyball games.⁵

Sources:

1. See P Aggleton (1995) *Men who have Sex with Men: Social and Behavioural Research, Implications for Needs Assessment*. London, Health Education Authority, for a review of these issues.
2. P Davies, P Weatherburn, A Hunt, F Hickson and T McManus (1992) The Sexual Behaviour of Young Gay Men in England and Wales. *AIDS Care*, 4, 3, 259–272.
3. D Kirby, L Short, J Collins *et al.* (1994) School-based Programs to Reduce Sexual Risk Behaviors: a review of effectiveness. *Public Health Reports*, 109, 339–360.
4. G Remafedi (1994) Cognitive and Behavioral Adaptations in HIV/AIDS among Gay and Bisexual Adolescents. *Journal of Adolescent Health*, 15, 114–122.
5. S Kegeles, R Hays & T Coates (1996) The Mpowerment Project: a community-level HIV prevention intervention for young gay and bisexual men. *American Journal of Public Health*, 86, 1129–1136.

What about relapse?

There has been much talk among HIV prevention workers and in the popular press about some gay and bisexual men having stopped practising safer sex. Most usually this occurs in regular partnerships or relationships where the HIV serostatus of both parties is known or strongly assumed. Some authors, particularly those working in the US, have called this phenomenon 'relapse', a term which carries with it connotations of personal inadequacy and recidivism.¹ Others have talked more constructively of 'negotiated safety' to describe the acts involved.² Certainly, the advent of drug treatments that may be effective in slowing the development of HIV disease and the availability of reliable HIV tests are beginning to change the ways in which many gay and bisexual men think about HIV infection. This may also have consequences for the circumstances and occasions when safer sex is practiced.

Research conducted in England and Wales in Project SIGMA finds no evidence to support the claim that there has been any whole scale 'relapse' to unsafe sexual behaviour, although there is evidence that safer sex is less likely to be consistently practiced in a regular partnership than in other circumstances.³ Suggestions have been made to help men who are thinking about having unprotected sex with a partner think about the issue. Among other things, they encourage both parties to ascertain their HIV antibody status, and negotiate agreements about practising safer sex outside the negotiated 'safe' relationship and about informing the regular partner immediately and returning to safer sex, should any risk occur.⁴

Sources:

1. See, for example, R Stall, M Ekstrand, L Pollack and T Coates (1990) Relapse from Safer Sex: The next challenge for AIDS prevention efforts. *Journal of the Acquired Immune Deficiency Syndromes*, 3, 1181–1187.
2. See *Venereology* Volume 9, Number 2, April–June 1996. The entire issue is devoted to a discussion of the concept of negotiated safety.
3. P Weatherburn, A Hunt, F Hickson and P Davies (1992) *The Sexual Lifestyles of Gay and Bisexual Men in England and Wales*. London, Project SIGMA.
4. See, for example, A Billington, F Hickson and M Maguire (1996) *Thinking it Through: a new approach to sex, relationships and HIV for gay men*. London, Camden and Islington Community Health Services NHS Trust.

Foundations for the future

Given the seriousness of the epidemic among gay and bisexual men in countries such as Britain, it is perhaps not surprising that important challenges for HIV prevention still remain. Among these are how best to work with men who are unable to spend time participating in small group educational and skill building activities, who may not feel an attachment to (and who may not wish to be attached to) the gay community, and who may have special needs linked to their age. These should be priority fields for future intervention research.¹

We also need to learn more about how best to meet the sexual health needs of those behaviourally homosexual and bisexual men who find it hard to talk about or be open about their sexuality. An implicit assumption behind much of the work that has taken place so far is a willingness to talk about sexual feelings and desires. For some men this may be an option, but for others it is not.

Finally, new challenges are likely to arise as a consequence of increased availability of new and more effective treatment drugs. There is already evidence to suggest that some forms of combination therapy may have the ability to reduce viral replication to undetectable levels. Does this mean that the individuals concerned need no longer worry about transmitting infection to others? What are the implications of this for future safer sex messages and interventions? What new roles will men who are HIV seropositive and their partners play in sustaining a more diverse, and possibly more satisfying, safer sex culture than has hitherto existed?

Source:

1. P Aggleton (1995) *Men who have Sex with Men: Social and Behavioural Research, Implications for Needs Assessment*. London, Health Education Authority.

Harm Minimisation and Injecting Drug Use

Can people who inject drugs change their behaviour?

Contrary to media stereotypes and popular beliefs about people who inject drugs, there is a large and growing body of evidence to suggest that 'drug injectors can and will change their behaviour to reduce their own risk of HIV infection and, to a lesser extent, the risk of transmitting the virus to others.'¹ This evidence is highly encouraging for those working in drug and HIV and AIDS-related health education and health promotion.

Source:

1. G Stimson and M Donoghoe (1996) Health promotion and the Facilitation of Individual Change. In T Rhodes and R Hartnoll (eds.) *AIDS, Drugs and Prevention*, London, Routledge.

What are the risks associated with injecting drug use?

People who inject drugs face two main risks in relation to HIV infection. First, like other sexually active people, they may acquire the infection through their sexual partners if they have unprotected sex. Second, they may acquire the infection through contaminated syringes and other injecting paraphernalia, if they share injecting equipment with others.

How can these risks be reduced?

In relation to sexual transmission, the main means of risk reduction are similar to those that should be adopted by all sexually active people – namely, the consistent and proper use of condoms, or the avoidance of penetrative sex. In relation to transmission through the sharing of needles, syringes and other equipment, several options are available. Some of these offer better means of protection than others. In order of efficacy they

include: stopping injecting drug use, which may involve switching to the use of non-injected drugs such as methadone; using sterile needles, syringes and other equipment every time; not sharing injecting equipment; and cleaning equipment between use.¹

Without doubt, the most effective way of reducing the risk of HIV infection is to give up injecting drugs, but where this is not possible, changing from injecting to non-injecting drug use can significantly reduce the risk of HIV transmission by non-sexual means. For those who inject opioid drugs such as heroin, this may be achieved through participation in a non-injectable drug substitution programme in which a drug such as methadone is administered orally. Methadone is one of the most extensively and rigorously evaluated drug treatment approaches. Such programmes have been shown to be associated with lower rates of HIV prevalence,² and with reduction in HIV risk due to injection and sharing behaviours.³

For opioid injectors who are not willing or prepared to stop, and for those who inject other drugs such as amphetamines, temazepam or anabolic steroids, other harm minimisation approaches may be needed. These include using sterile needles and syringes every time, not sharing injecting equipment, and cleaning injecting equipment between use. Another important way of making clean syringes and needles more readily available is through needle and syringe exchange programmes. These have been shown to be effective in preventing the transmission of HIV, and do not increase the use of illegal drugs.^{4,5} Studies in the Netherlands, Britain, Australia and many other countries have shown that syringe and needle exchange programmes significantly reduce the risk of HIV infection through injecting drug use.⁶

Sources:

1. T Rhodes (1994) *Risk, Intervention and Change*. London, Health Education Authority.
2. A S Abdul-Quader, S R Friedman, D Des Jarlais, *et al.* (1987) Methadone Maintenance and Behavior by Intravenous Drug Users that can Transmit HIV. *Contemporary Drug Problems*, 14, 425–434.

3. J C Ball, W R Lange, C P Meyers and S R Friedman (1988) Reducing the Risk of AIDS through Methadone Maintenance Treatment. *Journal of Health and Social Behaviour*, 29, 214–226.
4. J Normand, D Vlahov and L Moses (eds.) (1995) *Preventing HIV Transmission: the role of sterile needles and syringes*. Washington DC, National Academy Press, for the National Research Council and Institute of Medicine.
5. P Lurie and A Reingold (1993) *The Public Health Impact of Needle Exchange Programs in the United States and Abroad*. Summary, Conclusions and Recommendations. San Francisco, UCSF Institute for Health Policy Studies. Obtainable from CDC National AIDS Clearing House, PO Box 6003, Rockville, MD 20849-6003, USA.
6. D Des Jarlais and S Friedman (1996) HIV Epidemiology and Interventions among Injecting Drug Users. *International Journal of STDs and AIDS*, 7 (suppl. 2) 57–61.

What do syringe and needle exchange schemes involve?

Syringe and needle exchange schemes aim to reduce the likelihood of HIV transmission. They do this by increasing the availability of sterile injecting equipment and removing contaminated syringes from circulation. Some of them refer injecting drug users to appropriate services. They may also provide information and advice on safer sex, and may distribute condoms for use by injecting drug users and their sexual partners. They also access more marginalised and vulnerable drug using populations.

Such schemes have several benefits. For injecting drug users using such programmes, they decrease the fraction of needles and syringes that are contaminated, reducing the likelihood of HIV transmission. For injecting drug users not using such programmes, they lower the fraction of contaminated needles in circulation, thus lowering the risk of new HIV infections more generally. They also reduce sharing and re-use occasions.¹

Syringe and needle exchange schemes have also been shown to be cost effective. By preventing infections among programme users, their drug and sex partners and their children, and by avoiding the lifetime costs associated with the treatment and care of such infections, exchange schemes can enable health authorities to make important budgetary savings.² A recent

study in the US estimated that between \$0.47 billion and \$1.09 billion in health care costs could have been saved had syringe and needle exchange programmes been established in that country in 1987, the discounted lifetime cost of treating HIV infection being estimated at \$55,640.³

Sources:

1. J Normand, D Vlahov and L Moses (eds.) (1995) *Preventing HIV Transmission: the role of sterile needles and syringes*. Washington DC, National Academy Press for the National Research Council and Institute of Medicine.
2. P Lurie & A Reingold (1993) *The Public Health Impact of Needle Exchange Programs in the United States and Abroad*. Summary, Conclusions and Recommendations. San Francisco, UCSF Institute for Health Policy Studies. Obtainable from CDC National AIDS Clearing House, PO Box 6003, Rockville, MD 20849-6003, USA.
3. P Lurie & E Drucker (1996) Opportunity Lost: Estimating the Number of HIV Infections due to the US Failure to Adopt a National Needle Exchange Policy. Abstract Tu. C. 324. 11th International Conference on AIDS, Vancouver.

What effects do syringe and needle exchange schemes have?

In most parts of the world, syringe and needle exchange schemes have not been introduced in isolation but as part of a package of prevention measures which may include information campaigns, access to HIV counselling and testing, and outreach work among harder to reach groups and populations. This makes it difficult 'to assess the impact of specific interventions in the context of a rapid emergency response'.¹ Nevertheless, studies in Britain,² the US,³ Canada⁴ and Australia⁴ show that compared with people who do not use syringe and needle exchanges, clients reported less syringe sharing and fewer sharing partners.

The effects of syringe and needle exchange schemes on sexual risk behaviour are less clear cut, but a number of studies suggest that moderate reductions in sexual risk taking can accompany the introduction of syringe and needle exchange schemes.⁵ There is evidence that some staff and clients find it difficult to discuss sexual matters. This may set limits on the ability of such schemes to reduce sexual risk.²

The sharing of injecting equipment is known to take place in prisons. In Switzerland, evaluation of a pilot needle distribution programme for female prisoners showed that the introduction of the scheme led to important decreases in the sharing of needles, an improvement in the health status of prisoners, no new cases of infection with HIV or hepatitis and no increase in drug consumption.⁶

It has sometimes been suggested that syringe and needle exchanges may have unintended consequences of a negative kind. They might, for example, encourage a more cavalier attitude towards the disposal of used equipment, leading to more needle stick accidents in public environments such as parks and the street. It is important to realise therefore that there is no evidence to suggest that syringe and needle exchange schemes produce an increase in the number of used needles that are thrown away in public places.³

Sources:

1. G Stimson and G Hunter (1996) Interventions with Drug Injectors in the UK: Trends in Risk Behaviour and HIV Prevalence. *International Journal of STD and AIDS*, 7 (suppl. 2), 52–56.
2. M Donoghoe, G Stimson and K Dolan (1992) *Syringe Exchange in England: An Overview*. London, the Tufnell Press.
3. J Normand, D Vlahov and L Moses (eds.) (1995) Preventing HIV Transmission: the role of sterile needles and syringes. Washington DC, National Academy Press for the National Research Council and Institute of Medicine.
4. WHO/PSA (1993) Multi-centre Study on Drug Injecting and the Risk of HIV Infection. A Report on behalf of the International Collaborative Group. Geneva, World Health Organisation, Programme on Substance Abuse.
5. See, for example, J K Watters (1994) Trends in Risk Behavior and HIV Prevalence in Heterosexual Injection Drug Users in San Francisco, 1986–1992. *Journal of Acquired Immune Deficiency Syndromes*, 7, 1276–1281.
6. J Nelles and A Fuhrer (1995) Drug and HIV Prevention in the Hindelbank Penitentiary. Abridged Report of the Evaluation Results. Bern, Swiss Federal Office of Public Health and J Nelles and T Harding (1995) Preventing HIV Transmission in Prison: A Tale of Medical Disobedience and Swiss Pragmatism. *Lancet*, 346, 1507.

Do syringe and needle exchange schemes increase drug use?

There is clear evidence that syringe and needle exchange schemes neither increase drug use as a result of providing access to sterile equipment, nor increase the frequency of injection among those using such schemes, or the number of new initiates to injecting drug use.^{1,2}

In the US, there is evidence to suggest that syringe and needle exchange schemes report increased referrals to drug treatment services, including those services that aim to help injecting drug users stop injecting.¹ This may have an additional benefit in that as a result of such referral some drug users at least may cease to inject thereby reducing the risk of other kinds of drug-related harm.

Sources:

1. J Normand, D Vlahov and L Moses (eds.) (1995) *Preventing HIV Transmission: the role of sterile needles and syringes*. Washington DC, National Academy Press for the National Research Council and Institute of Medicine.
2. P Lurie and A Reingold (1993) *The Public Health Impact of Needle Exchange Programs in the United States and Abroad*. Summary, Conclusions and Recommendations. San Francisco, UCSF Institute for Health Policy Studies. Obtainable from CDC National AIDS Clearing House, PO Box 6003, Rockville, MD 20849-6003, USA.

How can such schemes be made more effective?

There are several ways in which existing syringe and needle exchange schemes can be made more effective. They include linking the provision of sterile needles and syringes more closely to HIV counselling and testing,¹ training staff in sexual counselling and advice giving,² and undertaking community-based outreach work among injecting drug users in conjunction with syringe and needle exchange.³ Ways of making clean syringes and needles more widely available through pharmacy outlets, hospital emergency departments, general practices, health centres, youth drop-in centres etc., also need to be explored.

Some people have claimed that the model of health promotion underpinning syringe and needle exchange focuses on the individual at the expense of wider social networks and community expectations. For lasting effectiveness, future interventions should move beyond counselling individuals not to share, to encourage changes in group or community norms among drug users.⁴ By doing this, the growing social norm of 'not sharing' can be reinforced and hopefully sustained.⁵

Sources:

1. E J C van Ameijden, J A R van den Hoek and R A Coutinho (1994) A Substantial Decline in Injecting Risk-Behaviour among Drug Users in Amsterdam from 1986–1992, and its Relationship to AIDS Prevention Programs. *American Journal of Public Health*, 84, 275–281.
2. M Donoghoe, G Stimson and K Dolan (1992) *Syringe Exchange in England: An Overview*. London, the Tufnell Press.
3. T Rhodes (1993) Time for Community Change. What has Outreach to Offer? *Addiction*, 88, 1317–1320.
4. S Friedman, W de Jong & A Wodak (1993) Community Development as a Response to HIV among Drug Users. *AIDS*, 7, (suppl. 1), S263–S269.
5. G Stimson and M Donoghoe (1996) Health promotion and the Facilitation of Individual Change. In T Rhodes and R Hartnoll (eds.) *AIDS, Drugs and Prevention*. London, Routledge.

Effective Use of Condoms

How effective are condoms?

When latex or rubber condoms are properly and consistently used for sexual intercourse, they can greatly reduce the risk of acquiring or transmitting a sexually transmitted disease (STD) including HIV.¹ Most typically, when used properly and consistently, they offer 98–99% protection against pregnancy and STDs such as gonorrhoea, herpes, genital ulcers and pelvic inflammatory disease.²

Laboratory studies have shown that properly manufactured latex condoms offer an effective mechanical barrier to HIV, and to virus sized particles the same size as HIV.³ Studies of heterosexual couples where one partner has HIV infection and the other does not, clearly show that provided condoms are used properly and consistently, HIV transmission does not occur.⁴

Nevertheless, condoms can occasionally break during either vaginal or anal sex (most typically on about 2% of occasions), and when they do there is a risk that HIV can be transmitted.² Condoms do not therefore offer 100% protection against infection.

Sources:

1. CDC (1994) How Effective are Condoms? Rockville, MD., CDC National AIDS Clearing House.
2. CDC (1988) Condoms for Prevention of STDs, *MMWR*, 37, 133–37; W Cates and K Stone (1992) Family Planning, STDs and Contraceptive Choice. *Family Planning Perspectives*, 24, 75–84.
3. R Carey *et al.* (1992) Effectiveness of Latex Condoms as a Barrier to HIV Virus-sized Particles under Conditions of Simulated Use. *Sexually Transmitted Diseases*, 19, 230–34.
4. I DeVincenzi and European Study Group on the Heterosexual Transmission of HIV (1993) Heterosexual Transmission of HIV in European Cohort of Couples. Abstract WS-CO2-1, IXth International Conference on AIDS, Berlin.

How should condoms be used?

The World Health Organisation offers the following advice on the proper use of condoms.¹

- 1 Carefully open the package so that the condom does not tear. Do not unroll the condom before putting it on.
- 2 If not circumcised, pull the foreskin back. Squeeze the tip of the condom and put it on the end of a hard penis.
- 3 Continue squeezing the tip of the condom while unrolling it until it covers the full length of the penis.
- 4 Always put a condom on before entering your partner.
- 5 After ejaculating (coming), hold the rim of the condom at the base of the penis and pull the penis out before it becomes soft.
- 6 Slide the condom off without spilling the semen inside.
- 7 Dispose of the condom by throwing it away with other rubbish.

Care should be taken not to use grease, oils, lotions, margarine, butter or Vaseline as a lubricant with condoms, since they will make condoms break. Instead, a water-based lubricant such as KY jelly should be used. A new condom should always be used each time a person has sex. Condoms should be stored in a cool dry place and not used if they are old or damaged. The *Kitemark* or European standard EN 600 on condom boxes guarantees they meet appropriate safety standards. Condoms should not be used if the package is broken, if the condom is dried out, if the colour is uneven, or if the condom is unusually sticky. Extra strong condoms may offer an additional degree of protection during vaginal or anal sex.

Source:

1. World Health Organisation (1992) *Guide to Adapting Instructions on Condom Use*. Geneva, World Health Organisation, Global Programme on AIDS.

Why do condoms break?

Condoms can break for a variety of reasons. Two rather different factors can be responsible for such breakage: those present before use and those occurring during use. Before use, condoms can become weakened by age, by incorrect storage and by broken packaging. Prolonged exposure to the air, for example, has been shown to reduce condom strength.¹ During use condoms may break because of differences in strength and production standards.² The use of inappropriate lubricants can also cause latex condoms to weaken and break or tear. Baby oil, for example, has been reported as destroying up to 95% of a condom's strength after only fifteen minutes.³ There is some evidence to suggest that experience using condoms is an important factor contributing to their effective use, with inexperienced users reporting more broken condoms than those who are more experienced.⁴

Sources:

- 1 R F Baker *et al.* (1988) Precautions when Lightning Strikes during the Monsoon: the effect of ozone on condoms. *Journal of the American Medical Association*, 260, 1404–05.
- 2 B Voeller *et al.* (1993) Viral Leakage through Selected Brands of Condoms. Mariposa Occasional Paper No. 19. Topanga, CA., Mariposa Education and Research Foundation.
- 3 London International Group (1994) *Durex Research Studies on Condoms, Spermicides and Lubricants*. Cambridge, LIG Research and Development.
- 4 R Hatcher and M Hughes (1988) The Truth about Condoms. *Siecus Report*, 17, 2, 1–9; M Steiner *et al.* (1993) Can Condom Users Likely to Experience Condom Failure be Identified? *Family Planning Perspectives*, 25, 220–26.

Are all condoms the same?

A wide variety of different condoms are available. They include those manufactured from lamb intestine (natural skin condoms), those manufactured from rubber or latex, and those made of polyurethane. Latex condoms are by far the most commonly available, and they can differ considerably in their thickness, shape, size, texture, colour and taste.

The majority of condoms have been designed for vaginal sex, although some are specially promoted for use in oral sex and anal sex. Condoms for oral sex tend to be flavoured, whereas those for anal sex tend to be thicker and stronger than others.¹ Condom strength can be measured in one of two ways: either by stretching until the condom breaks, or by inflation until it breaks. Most manufacturers electronically screen every condom to find holes or thin spots. This screening is usually advertised by the statement 'electronically tested' on condom packets.²

A range of different national and international standards exist for condom strength and safety. They include British Standards, US standards and new European standards (EN 600). The latter have been set at the level of the most demanding common denominator among EU member states. There is also a forthcoming revised international standard (ISO 4074). It is important to purchase condoms that have been tested to one of these standards.³

Plastic polyurethane condoms are becoming available in an increasing number of countries. They offer benefits to those who may be allergic to latex, they can be kept longer without breaking down in heat or cold, and they can stand up to oil-based lubricants. However, polyurethane condoms have not yet been extensively tested to see what protection they offer against pregnancy and STDs including HIV.⁴ A recent review of current knowledge concerning the male polyurethane condom suggests that when used consistently and correctly, they may perform at least as well as latex condoms and are preferred by many users.⁵

Sources:

1. S Golombok and J Sheldon (1994) Evaluation of a Thicker Condom for Use as a Prophylactic against HIV Transmission. *AIDS Education and Prevention*, 6,4, 378–82.
2. Population Reports (1990) *Condoms – Now More than Ever*, Series H. Volume 8, No. 3. Baltimore, Maryland, John Hopkins School of Hygiene and Public Health.
3. See 'The Harmonisation of Condom Standards Across Europe' in *Barrier Protection Digest*, Special XI International Conference on AIDS edition, 1996, 2. Ely, Health Network Ltd.
4. Common Sense about AIDS (1995) News You Need to Know about Plastic Condoms. *AIDS Alert* 10,1 (Supplement), 1–2.
5. J Rosenberg, M Waugh, H Solomon and A Lyszkowski (1996) *Contraception*, 53, 141–146.

What about the female condom?

A vaginal or female condom is now available in a number of countries. It consists of a polyurethane tube with flexible polyurethane rings at either end. It is inserted like a diaphragm or 'cap' so that the inner ring fits behind the pubic bone and the outer ring covers the labia or lips that surround the vagina. Users' reactions to the female condom have been mixed, with some people finding it acceptable and others less so.

Laboratory studies have shown that the female condom offers an effective mechanical barrier to viruses including HIV. Information from the few investigations conducted outside the laboratory show that the use-effectiveness of the female condom in preventing pregnancy most typically varies from 75% to 82%. When used correctly for every act of sexual intercourse though, it is estimated that the effectiveness of the female condom in preventing pregnancy could be as high as 95–97%.¹ Systematic clinical studies have yet to be conducted, however, to investigate the effectiveness of the female condom in preventing STDs including HIV.²

Sources:

1. UNAIDS and WHO (1996) *The Female Condom Fact Sheet*. Geneva, UNAIDS.
2. CDC (1994) *How Effective are Condoms?* Rockville, MD., CDC National AIDS Clearing House.

Conclusions

Effective interventions for prevention

Throughout this book, there has been discussion of some of the most effective ways in which to undertake HIV prevention, both with particular groups and with the population more generally. The aim has been to provide evidence of the interventions that work best when it comes to preventing new cases of infection, and when it comes to promoting sexual and reproductive health. A range of different sources of evidence have been drawn upon, and many different studies have been highlighted. Findings from these studies can be used by health educators and health promoters to justify the interventions they make, and the prevention programmes they develop. But care should be taken to recognise the limitations of different styles of research, and the dangers of generalising beyond the context in which a particular style of work has been shown to be successful.

Evidence-based approaches

The move towards evidence-based health promotion has stimulated new interest in the identification of interventions and approaches that can be shown to 'work'. Yet as was emphasised in Chapter 1, there exist many ways in which evidence of intervention effectiveness can be demonstrated. While experimental evaluations (particularly RCTs) are much favoured by those working within the natural and biomedical sciences, they are not the only approaches to adopt. Well designed objectives-based or theory-driven evaluations can go a long way to linking interventions to particular outputs or outcomes. Observational studies too have a place in much local work, particularly when new and perhaps innovative approaches are being tried out. Current talk of 'gold standards' and efforts to decry non-experimental styles of evaluation, are at best blinkered and at worst positively dangerous, in that they seek to privilege above all other forms of understanding those that derive from studies conducted under the most artificial of conditions (such being the nature of well designed experimental studies). As will be clear from the work described in this book, it is most usually when findings

from a range of studies coincide that we can be most certain of the appropriateness of a chosen style of intervention. Some fifteen years into the epidemic, it is beginning to become clear which prevention approaches work and which ones do not.

A continuing epidemic

In a recent letter to the resident 'agony aunt' of a young people's magazine in Britain, a young woman described how her boyfriend had tried to persuade her to have unprotected sex because AIDS has 'gone away'. Quality newspapers too talk of the 'myth' of AIDS, and of the possibility that expert medical opinion in the West might have got it all wrong – AIDS is nothing more than a collection of old diseases under a new name. And in our own lives, be we professionals engaged in HIV-related health promotion or otherwise, some of the urgency to act quickly, so characteristic of the early days of the epidemic, has been dissipated by news that there may yet be a 'cure' for HIV-related disease through early intervention and combination therapy.

But AIDS has not gone away; nor has it ever been a myth. Moreover, the antiretroviral combination therapy that might arrest HIV disease is not widely available in industrialised countries, let alone in the developing world. In many ways, and despite our best efforts, the epidemic continues to take its toll. Every day, new groups are affected; every day, individuals who believed themselves protected by their religious beliefs or by virtue of not belonging to a so-called 'risk group' find themselves infected; and every day, efforts to halt the epidemic seemingly weaken, as new priorities take the place that AIDS once held. If this book, and the research it describes, offer support to those seeking to justify their work in the face of one of the most serious health threats the world has even known, its aims will have been realised. If it results in a more critical appreciation of the strengths and limitations of different kinds of evidence and different styles of research, it will have achieved its goals. And if it promotes the development of health promotion interventions that see people living with HIV as part of the solution to the epidemic rather than a 'problem', its publication will have been more than justified.